

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A system for recognizing documents provided with a security mark comprising a substance which is excitable when a light coming from a corresponding light source is emitted on it so as to emit light at different wavelengths, the system comprising
a monochromatic light source for exciting the substance; and
at least two detector assemblies (3) for detecting light emitted by the excitable substance of the security mark of the document to be recognized;
each detector assembly (3) being associated to a system for electronic processing defined by a filter (7) and an amplifier (8), connected to a single microprocessor;
each detector assembly (3) being integrated in a body (9) that groups together all the detector assemblies (3) for detecting the light emitted by the excitable substance of the security mark, said detector assemblies being directed towards a common point, in order that the intensities of the light emitted by the mark, at different wavelength ($\lambda_1 - \lambda_n$), be detected by the detector assemblies, the microprocessor being arranged to analyze the detected light intensities at different wavelengths comparing them with a set of values stored in a memory of the microprocessor, for the purpose of determining whether the document recognized is an authentic document or a counterfeit document.
2. (Original) A system according to claim 1, wherein the light source comprises a diode laser (1) of small dimensions and with focused light, so that all of the light output is at a narrow wavelength and at one point.
3. (Currently Amended) A system according to claim 1 ~~or 2~~, wherein each detector assembly (3) is defined by a photodiode (4), a filter (5) and a lens (6), duly encapsulated.
4. (Original) A system according to claim 3, wherein the filters (5) are selected so

that different detector assemblies (3) detect the intensity of light corresponding to different wavelengths (λ_1 - λ_9).

5. (Currently Amended) A system according to ~~any of the preceding claims~~, wherein claim 1, wherein the elements forming part of the system are arranged so that the detection path length is very short, whereby a better optical tolerance with regard to the banknote pass distance, and a small-sized and low cost equipment, are obtained.

6. (Currently Amended) A system according to ~~any of the preceding claims~~ claim 1, wherein the system incorporates a presence detector determining the placement of the security mark on the document to be recognized.

7. (Currently Amended) A system according to ~~any of the preceding claims~~, claim 1, wherein the light source is provided with a filter for achieving the necessary monochromatic character.

8. (Currently Amended) A system according to ~~any of the preceding claims~~ claim 1, wherein the light source comprises a diode laser.

9. (Original) A system according to claim 8, wherein the diode laser is a modulated frequency diode laser (1).

10. (Currently Amended) A system according to ~~any of the preceding claim~~ claim 1, the system being arranged to analyze relative intensities of light emitted by the excitable substance at different wavelengths (λ_1 - λ_9) detected by the respective detector assemblies (3), the wavelengths being determined by the respective filters (5) integrated in the respective detector assemblies.

11. (Currently Amended) A system according to ~~any of the preceding claims~~ claim 1,

the system being arranged to determine, with the definition of a threshold, the existence or non-existence of emission of light by the excitable substance, at different wavelengths (λ_1 - λ_9) detected by the respective detector assemblies (3), the wavelengths being determined by the respective filters (5) integrated in the respective detector assemblies.

12. (Currently Amended) A system for recognizing documents according to ~~any of the preceding claims~~ claim 1, wherein the detector assemblies (3) are arranged for detecting light emitted, by reflection, by the excitable substance of the security mark.

13. (Currently Amended) A system for recognizing documents according to ~~any of claims 1-11~~ claim 1, wherein the detector assemblies (3) are arranged for detecting light emitted, by transmission, by the substance of the security mark.